

Steel-pouring Ladles (Buckets) Lined with Unburnt
Magnesite

SOV/131-59-6-2/15

linings produced in February and March 1959 met the specifications of the VTU (Table 3). They shall only be transported in covered waggons, and well packed, and shall only be stored in covered and dry rooms. Unburnt linings were tested in the metallurgical works of the Donets-basin, when treated under the same conditions as the burnt ones, and good results were achieved. Conclusion: The unburnt linings of magnesite are not inferior to burnt linings, neither in quality, nor in their working results achieved in steel casting ladles with a capacity up to 200 t. The omission of the burning process brings about considerable saving. The productional technology developed in the works imeni Dzerzhinskiy, allows an increase of output of linings without much capital investment. There are 4 figures and 4 tables.

ASSOCIATION: Krasnoarmeyskiy dinasovyy zavod im. Dzerzhinskogo
(Krasnoarmeysk Dinas Works imeni Dzerzhinskiy)

Card 2/2

SIDORENKO, Yu.P.; BOGOCHAROVA, T.I.

Mechanised pressing of composite irregularly shaped
Dinas products. Ogneupory 25 no.9:428-429 '60.
(MIRA 13:8)

1. Krasnoarmeyskiy dinasovyy zavod im.Dzerzhinskogo.
(Firebrick)

SIDORENKO, Yu.P.; BOGOCHAROVA, T.I.

Major repairs of gas-fired kilns. Ogneupory 26 no. 2:90-91
'61. (MIRA 14:2)

1. Krasnoarmeyskiy dinasovyy zavod im. Dzerzhinskogo.
(Kilns--Maintenance and repair)

SIDORENKO, Yu.P.

Major repair of the facing walls of gas-chamber kilns. Og-zupory 26
no. 4:194-195 '61. (MIRA 14:5)

1. Krasnoarmeyskiy dinasovyy zavod.
(Refractory materials) (Kilns)

BOVKUN, S.S.: SIDOROVIC, Y.

Firing heavy coke Dinas in tunnel killed. Ogneupory 26 no.9:
399-402 '61. (MIRA 14:9)

1. Dinasovyy zavod im. Dzerzhinskogo.
(Firebrick)

SIDORENKO, Yu.P.; LOGOYDA, V.M.

Operation of an automated wet pan at the Krasnoarmeiskii Dinas
plant. Ogneupory 26 no.10:472-474 '61. (KIRA 14:11)

1. Krasnoarmeyskiy dinasovyy zavod imeni Dzerzhinskogo.
(Krasnoarmeysk--Firebrick)

PIROGOV, A.A.; LEVE, Ye.N.; KRASS, Ya.R.; BELICHENKO, G.I.; KOTIK, P.L.;
SIDORENKO, Yu.P.; ZIL'BERG, Ye.S.; DRYAPIK, Ye.P.; VAYNTRAUB, S.S.;
ZHIDKOV, V.A.; SHCHEDRINSKIY, L.I.; MOREV, G.P.

Prefabricated blocks of unfired magnesite-chromite brick.
Metallurg 9 no.4:23-24 Ap '64. (MIRA 17:9)

1. Ukrainskiy institut ogneuporov, Nikitovskiy dolomitovyy
kombinat i Kommunarskiy metallurgicheskiy zavod.

L0759

S/120/62/000/004/040/047
E039/E420

24 6/00
AUTHORS: Veselov, M.A., Gol'din, L.L., Kirpichnikov, I.V.,
Lomkatsi, G.S., Sidorenko, Z.S., Sysoyev, Ye.A.

TITLE: Investigation of the magnetic field configuration in
the X-blocks of the proton synchrotron

PERIODICAL: Pribery i tekhnika eksperimenta, no.4, 1962, 212-217

TEXT: The magnetic field configuration is measured in
14 compensating blocks at various levels of induction from
80 gauss up to 8000 gauss. Magnetic field gradients are measured
with an accuracy of better than 0.1% and the displacement of the
neutral point obtained with an accuracy of 0.05 to 0.07 mm.
A plexiglass carriage is located on the magnet poles and can
traverse the whole length of the block (1910 mm). This carriage
contains three pairs of permalloy probes for measurements in low
fields and three pairs of coils for the medium and large fields.
The field characteristics are measured at 31 points along the
14 X-blocks. The distribution of the field and its gradient is
obtained near the axis of symmetry for 5 values of induction
(82, 106, 210, 2600 and 7500 Oe) and on 6 of the C-blocks at
Card 1/2

Investigation of the magnetic ...

S/120/62/000/004/040/047
E039/E420

8400 Oe. These measurements are compared with similar measurements on C-blocks. It is shown that displacement of the neutral point depends on the residual field. Displacement also occurs in strong fields because of core saturation. The results are presented graphically and discussed in some detail. The coordinates of the pole pieces with respect to the geodetic markers are determined to an accuracy of 0.03 to 0.04 mm. There are 8 figures.

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki
GKAE (Institute of Theoretical and Experimental
Physics GKAE)

SUBMITTED: March 31, 1962

Card 2/2

L 14438-66 EWT(m)/T IJP(e)
ACC No: AT6002500

SOURCE CODE: UR/3138/65/000/362/0001/0012

AUTHOR: Birger, M. G.; Borinov, V. S.; Bysheva, G. K.; Gol'din, L. L.; Keretkov,
M. M.; Martusov, Ye. I.; Sidorenko, Z. S.; Tumanov, G. K.

ORG: none

19.55
TITLE: Measurement of proton momentum as a function of acceleration time on the
synchrotron at the Institute of Theoretical and Experimental Physics

17.55
SOURCE: USSR. Gosudarstvennyy komitet po ispol'zovaniyu atomnoy energii. Institut
teoreticheskoy i eksperimental'noy fiziki. Doklady, no. 362, 1965. Izmereniye za-
visimosti impul'sa protonov sinkhrotrona ITEF ot vremeni uskoreniya, 1-12

TOPIC TAGS: proton beam, synchrotron, particle physics

ABSTRACT: A beam of particles emitted at an angle of 0.222 rad to the direction of
incident proton was analyzed by an SP-12 magnet located 13 m from a polyethylene
target. Positively charged particles deflected by this magnet at an angle of 0.232
rad reached the detector. The detector count rate was measured as a function of
magnet current. The energy of elastically scattered protons was used as a basis for
determining momentum. The measurements were made at four different time intervals

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ACC NR: AT6002500

from the beginning of the acceleration cycle. The following table gives the results of these measurements

Results of measurements of proton momentum P
as a function of acceleration time

t in sec	$P(1 \pm \delta P/P)^d$ in bev/c
0.404	2.20 (1 \pm 0.006)
0.408	2.25 (1 \pm 0.006)
0.813	4.45 (1 \pm 0.006)
0.817	4.49 (1 \pm 0.006)
1.176	6.35 (1 \pm 0.006)
1.420	7.64 (1 \pm 0.009)

where $\frac{\delta P}{P}$ is the relative error in momentum determination. The experimental errors

are analyzed and the following formula is given for proton momentum as a function of acceleration time: $P = 0.08 + 5.34 t$. Orig. art. has: 6 figures, 1 table, 1 formula.

SUB CODE: 20/ SUBM DATE: 21Jun65/ ORIG REF: 002/ OTH REF: 000

Card 2/2

SIDORENKO, Z.V.

Relation of polymetallic mineralization to dikes of basic rocks
in deposits of northwestern Rudnyy Altai. Biul.MOIP. Otd.geol.
31 no.4:105-106 J1-Ag '56. (MLRA 9:12)

(Altai Mountains--Ore deposits)
(Altai Mountains--Dikes (Geology))

SIDORENKO, Z.V.

Sedimentary genesis of microquartzites in the Zmeinogorsk and
some other complex ore deposits of the Rudnyy Altai. Inform. abor.
VSEGEI no.9:43-51 '59. (MIRA 13:12)
(Altai mountains--Ore deposits)

See relations of Congo ex. assets deposits to the Nigerian
instructions of the Ministry of the Interior, 1952-1953

(MIRA 2.0)

SHCHEGLOV, A.D.; BEUS, A.A.; BORODIN, L.S.; ITSIKSON, G.V.; PAVLOVSKIY,
A.B.; RUNDKVIST, D.V.; SILORENKO, Z.V.; TVALCHRELIDZE, G.A.

Conference on the problems of postmagmatic ore formation.
Sov. geol. 7 no.3:144-153 Mr '64. (MIRA 17:10)

SIDORENKO, Z.V.

Effect of the depth factor on the formation of complex metal deposits in the Altai and their distribution in a stratigraphic cross section. Izv. AN Kazakh. SSR. Ser. geol. 21 no.5:3-14 S.O '64. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut, Leningrad.

SIDORENKO, Z.V. ; BERGER, V.I., PETROVERIZ, A.M.

Antimony-mercury ore zones in the Maritime Territory. Dokl. AN SSSR
164 no.5:1137-1140 0 '65. (MIRA 18:10)

1. Submitted March 30, 1965.

SIDORENKOV, A. N.

"Stresses in Thin Sheets as a Result of Loss of Stability During Welding."
Cand Tech Sci, Leningrad Shipbuilding Inst, Leningrad, 1954. (KL, No 3, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher
Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

YEVSTIGNEYEV, Vasilii Pavlovich; SIDORENKOV, A.M., otvetstvennyy red.;
KAZAROV, Yu.S., red.; TSAI, R.K., tekhn.red.

[Preparation and straightening of thin sheet-metal structures in
shipbuilding] Opyt izgotovleniia i pravki tonkolistovykh konstruktsii
v sudostroenii. Leningrad, Gos. soizuznoe izd-vo sudostroit. promyshl.,
1957. 30 p. (MIRA 11:3)

(Sheet-metal work) (Shipbuilding)

SIDORENKOV, A.N.

PHASE I BOOK EXPLOITATION

286

Grigor'yev, Aleksandr Andreyevich, Sidorenkov, Anatoliy Nikolayevich.

Mestnyye svarochnyye deformatsii tonkolistovykh konstruktsiy i mero-priyatiya po ikh umen'sheniyu (Local Deformations of Welded Thin-sheet Structural Elements and Ways of Minimizing Them) Leningrad, Sudpromgiz, 1957. 127 p. 3,000 copies printed.

Scientific Ed.: Dormidontov, F.K.; Tech. Ed.: Levochkina, L.I.

PURPOSE: The book is intended for designers, technicians, and skilled workers who participate in the development of methods used in the fabrication of thin-sheet welded structures.

COVERAGE: The special features of local welding deformations in thin-sheet structures are considered, as well as the influence of various design and technological factors on the magnitude of the deformations. Suggestions are given on ways of minimizing local deformations for consideration in the design and preparation of thin-sheet structures; specific examples are presented for the selection of the elements of thin-sheet structures and of the optimum sequence in their preparation.

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Local Deformations of Welded Thin-sheet Structural (Cont.)

The authors consider some of their conclusions not final; they state that additional theoretical and experimental research is required. The data mentioned in the book are the result of theoretical investigation and of observations and measurements of deformations which occurred in the manufacture of industrial designs. In addition, some results of the investigations of Professor N.O. Okerblom, Doctor of Technical Sciences, and I.P. Baykovaya, Candidate of Technical Sciences, were used. Chapters I, III, and V were written by A.N. Sidorenkov, chapters II, IV, and VI by A.A. Grigor'yev. The book contains 76 figures and 13 references, all USSR.

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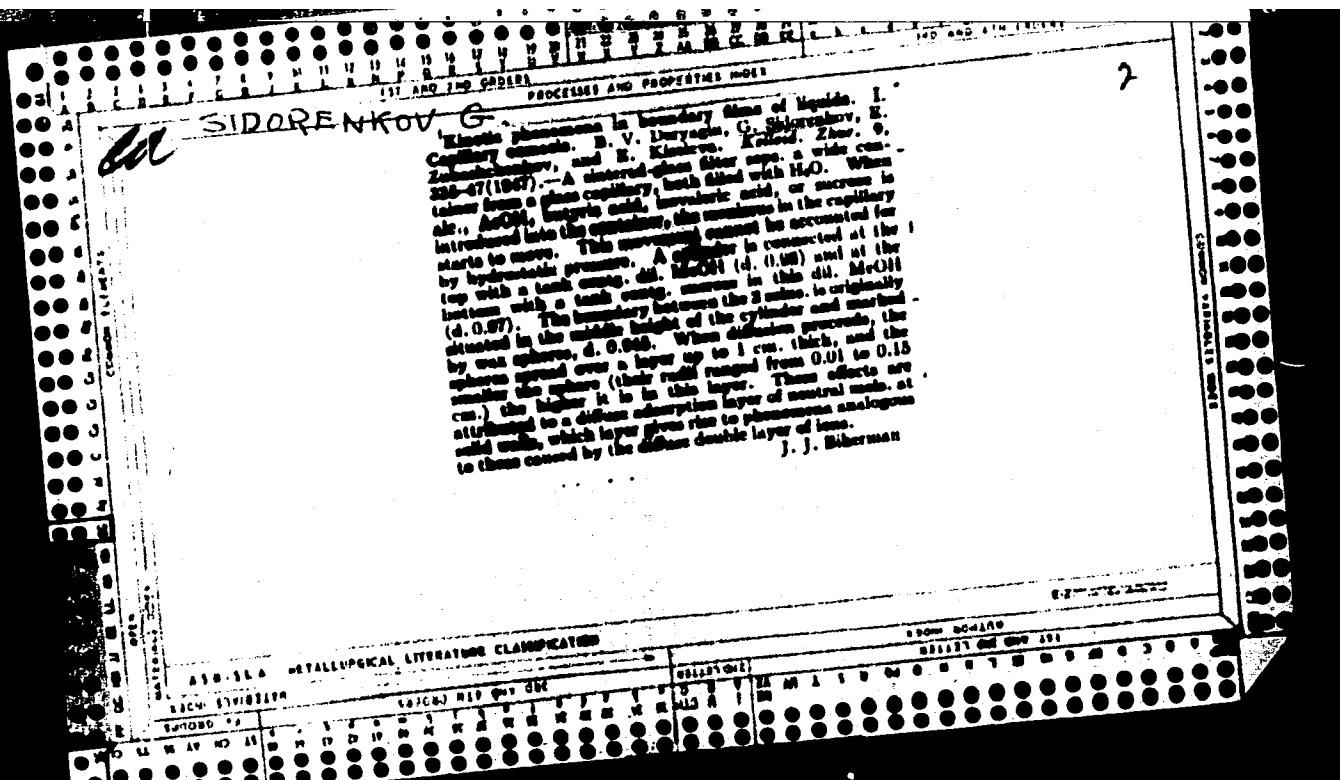
AVAILABLE: Library of Congress (TS227.G795)

Card 8/8

MLM/lab
May 27, 1958

SIDORENKO, G.

"Thermosmosis at Ordinary Temperatures and its Analogy with the Thermomechanical Effect in Helium II," Dok. AN, 32, No. 9, 1941. Mbr., Biophysics Lab., Dept. Biol. Sci., Acad. Sci., -1941-.



107-57-1-49/60

AUTHOR: Sidorenkov, G. (Omsk)

TITLE: Shielding of Grid-Circuit Parts. Experience Exchange (Ekranirovaniye detaley setochnykh tsepey. Obmen opytom)

PERIODICAL: Radio, 1957, Nr 1, p 50 (USSR)

ABSTRACT: A suggestion is made to shield not only the screen-circuit wires of an AF amplifier but also various resistors, capacitors, etc., which could be mounted in metal shields similar to those used for RF coils.
There are 2 figures in the article.

AVAILABLE: Library of Congress

Card 1/1

11(4)

SOV/92-58-10-24/30

AUTHOR: Sidorenkov, G.G, Engineer

TITLE: The Omsk Refinery is Three Years Old (Omskomu NPZ tri goda)

PERIODICAL: Neftyanik, 1958, Nr 10, p 31 (USSR)

ABSTRACT: The first industrial units of the Omsk refinery were put on stream three years ago. Over forty different units now operate at the above refinery which produces lube oil, asphalt and liquid gas in addition to motor fuels. Much attention is paid at the refinery to various inventions and innovations. They permit the refinery to realize a considerable saving. The automation bureau started testing a semi-automatic device for determining the flash point of petroleum products. Efforts are being made to develop an automatic device to determine the flash point of a flowing product. The settlement of oilmen, built at the Irtysh river, is growing and its appearance improved. It contains numerous schools, kindergartens, shops and various recreational facilities. Many young engineers,

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The Omsk Refinery is Three Years Old

SOV/92-58-10-24/30

technicians, and specialists, who recently graduated from schools now work at the Omsk refinery. Numerous refinery staff members are being trained without interrupting their principal occupation. The erection of industrial units which will produce synthetic acids and sulfanol is accelerated as the resolution of the Central Committee of the Communist Party has provided. There are 2 photographs, one showing the refinery kindergarten, and the other children in a class.

ASSOCIATION: Omskiy NPZ (The Omsk Refinery)

Card 3/2

S/081/62/000/017/071/102
B156/B186

AUTHORS: L'vov, I. A., Sidorenkov, G. G.

TITLE: The catalytic cracking of the heavy wide fraction from thermal cracking

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 17, 1962, 470, abstract 17M135 (Novosti neft. i gaz. tekhn. Neftepererabotka i neftekhimiya, no. 2, 1961, 3 - 6)

TEXT: The heavy wide thermal cracking fraction can be refined in an industrial catalytic cracking unit with the fraction either in pure form or mixed with directly distilled crude, in order to produce high octane gasoline and an increased amount of light gas oil, the latter to be used as a component of diesel fuel. To refine this crude, the processing scheme of standard catalytic cracking plant is maintained intact. The total yield of light products is ~15% higher than when using straight-run fuel. To ensure a long working period between repairs, and to raise the output above the planned figure, the boiling limit for the wide thermal cracking fraction must be $\leq 480 - 490^{\circ}\text{C}$ and the amount of asphalt-tar

Card 1/2

The catalytic cracking of the...

S/081/62/000/017/071/102
B156/B186

constituents must be $\leq 16\%$. To produce a gasoline with an increased octane number, the wide thermal cracking fraction must start to boil at 210 - 220°C. [Abstracter's note: Complete translation.]

Card 2/2

L 41589-65 EWT(m)/EPF(c)/T Pr-4 WE
ACCESSION NR.: AT5008635

S/2933/64/007/000/0205/0209

AUTHORS: Gryazev, N. N.; Sidorenkov, G. G.

TITLE: Desulfurization of clear petroleum products on aluminosilicate catalyst

SOURCE: AN SSSR. Bashkirskiy filial. Khimiya seraorganicheskikh soedineniy, soderzhashchikhsya v neft'yakh i nefteproduktakh, v. 7, 1964, 205-209

TOPIC TAGS: sulfur, petroleum, silicate, diesel fuel

ABSTRACT: The results of desulfurizing diesel fuels and catalytic gas oil and their mixtures in the presence of an aluminosilicate catalyst are reported. The catalyst was in standard bead form with an activity index between 36 and 38. The experiment was carried out with five samples of diesel fuels (S-1%), five samples of catalytic gas oil (S-1.1%), and five samples of a mixture of the two. The desulfurization was studied as a function of reaction temperature and volumetric rate. The results show that maximum desulfurization for catalytic gas oil is obtained at 300C for a volumetric rate of 0.5 per hour and at 350C for a volumetric rate of 1.0 per hour. In general, maximum desulfurization for diesel fuels was about 45-50% and 25-30% for catalytic gas oil. The results with the mixtures were

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L 41589-65

ACCESSION NR: AT5008635

nonadditive. Best desulfurization was obtained with a mixture ratio 1:1 at temperatures of 375-400C. Orig. art. has: 4 figures and 2 tables. 2

ASSOCIATION: Saratovskiy politekhnicheskii institut, Omskiy neftepererabatyvayushchiy zavod (Saratov Polytechnic Institute, Omsk Petroleum Refinery)

SUBMITTED: CO

ENCL: 00

SUB CODE: FP

NO REF SOV: 007

OTHER: 000

Card 2/2

WITKOV, I.S.

Desulfuration of the gas-oil fraction on an aluminosilicate
catalyst, Izv. SO AN SSSR no.3 Ser. khim. nauk no.1:108-114 '65.
(MIRA 18:8)

1. Institut kataliza Sibirskogo otdeleniya AN SSSR, Novosibirsk.

SIDORENKOV, G. I.

USSR/ Engineering - Oil Pump

Card : 1/1

Authors : Sidorenkov, G. I., Engineer

Title : About lubricator drives

Periodical : Vest. Mash., 34, Ed. 6, 15 - 18, June 1954

Abstract : A description is given of several types of devices, such as ratchet and worm screw, for providing a constant flow of lubricant to reciprocating type machines. Formulas are presented for exact mathematical computation of their design. Graph; drawings.

Institution : ...

Submitted : ...

SIDORENKO, G.I., inzhener.

Pneumatic chopping hammers. Vest.mash. 36 no.11:27-30 N '56.
(MLRA 10:1)

(Forging machinery) (Pneumatic machinery)

SIDOROV, G. I.

Spring meters of effective work. Ism. tekhn. no. 4:61-65 J1-Ag '57.
(Dynamometers) (MLRA 10:8)

SIDORENKOV, G.I., inzh.

Efficient design of pneumatic valve hammers. Izv.vys.ucheb.zav.;
mashinostr. no.4:71-89 '61. (MIRA 14:6)

1. Leningradskiy inzhenerno-stroitel'nyy institut.
(Pneumatic tools)

I 18544-66
ACC NR AP6002179 (N) SOURCE CODE: UR/0146/65/008/006/0105/0107 19

AUTHOR: Sidorenkov, G. I.

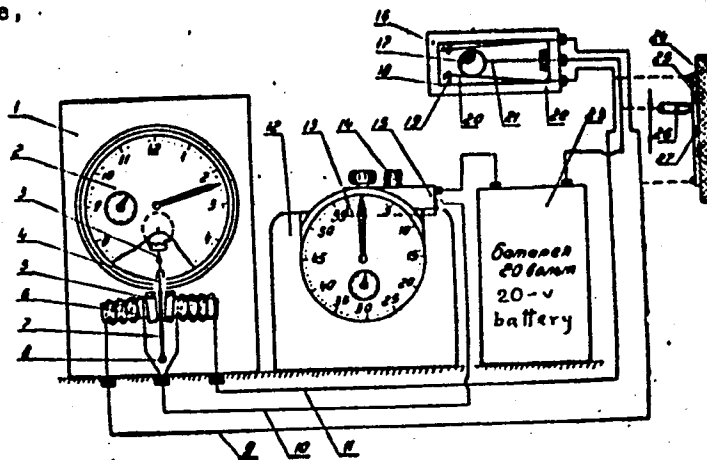
ORG: Bryansk Institute of Transport Machine Building (Bryanskiy institut transportnogo mashinostroyeniya) B

TITLE: Electromechanical oscillation counter 10

SOURCE: IVUZ. Priborostroyeniye,
v. 8, no. 6, 1965, 105-107

TOPIC TAGS: oscillation counter,
frequency meter

ABSTRACT: Essentially, the electromechanical counter comprises counting mechanism 1, interrupter 12, and sensor 16 (see figure). The sensor is fastened to the object whose oscillations or vibrations are being measured. Sensor pulses operate clockwork-type



Card 1/2

UDC: 534.321.8

- 10544-66

ACC NR: AP6002179

Mechanism 1 which counts the number of pulses. Pushbutton 14 can be used for measuring time by stopwatch 12 and figuring out the frequency. The instrument is claimed to be reliable up to 3500 vibrations per minute and to have an error of $\pm 0.25\%$. Orig. art. has: 1 figure.

SUB CODE: 09 / SUBM DATE: 04Jul64 / ORIG REF: 002

Card 2/2 *WJG* S

SIDORENKO, I. V., and KUZHMEN, V. I. (USSR)

"Mechanism of Action of Certain Anaesthetics."

Report presented at the 5th International Biochemistry Congress,
Moscow, 10-16 Aug 1961

KUZHMAN, M.I.; SIDORENKO, I.V.; TENYAROV, P.T.

Effect of novocaine on oxidative deamination by the kidney
tissue of rabbits of different ages. Trudy Oren. otd.Vses.
fiziol. ob-va no.2:91-94'60. (MIRA 16:8)

1. Kafedra biokhimii (zav. - prof. I.V.Sidorenkov) Oren-
burgskogo meditsinskogo instituta.
(NOVOCAINE) (AMINO ACID METABOLISM)
(AGING)

SIDORENKOV, N.S.

Effect of irregularities of the earth's rotation on atmospheric
and hydrospheric processes. Probl. Arkt. i Antarkt. no.9:45-49
'61. (MIRA 15:1)

(Earth--Rotation)
(Hydrometeorology)

SIDORENKOV, N.S.

Effect of atmospheric fluctuations on the rotation of the earth.
Izv. AN SSSR. Ser.geofiz. no.2:377-380 F '63. (MIRA 16:3)

1. Zapadno-Sibirskoye upravleniye gidrometeorologicheskoy sluzhby.
(Atmosphere) (Earth—Rotation)

SIDORENKOV, N.S.

Variations in the earth's rotation. Izv. AN SSSR Ser. geofiz.
no.5:730-739 My '63. (MIRA 16:6)

1. Zapadnosibirskoye upravleniye gidrometeorologicheskoy
sluzhby.

(Earth--Rotation)

SIDORENCOV, P., polkovnik

Our propagandists have raised their ideological and theoretical qualifications. Komm. Vooruzh. Sil 1 no.1:57-61 0 '60.

(MIRA 14:7)

1. Zamestitel' nachal'nika ~~otdela~~ propagandy i agitatsii politupravleniya Prikaznatskogo voyennog okruga.

(Russia--Army--Political activity)

SIDORENKOV, P., polkovnik

Our fraternal friendship is growing stronger. Komm.Vooruzh.Sil 2
no.3:51-54 F '62. (MIRA 15:1)

1. Nachal'nik otdela propagandy i agitatsii politupravleniya
Priкарпатского войennого okruga.
(Russia--Armed forces--Political activity)

SIDORENKOV, P., polkovnik, kand. istoricheskikh nauk

Socialist patriotism and proletarian internationalism. Komm.
Vooruzh. Sil 4 no.11:63-70 Je '64. (MIRA 17:9)

DAVYDOV, A.S., polkovnik; KORSHUNOV, V.N., polkovnik; KOZLOV, N.D., podpolkovnik; LUKANIN, Ye.A., polkovnik; NESIN, A.A., polkovnik; POZMOGOV, A.S., polkovnik; PUTINTSEV, A.I., podpolkovnik; SIDORENKOV, P.I., polkovnik; SYTOV, L.G., polkovnik; FEDIN, G.R., polkovnik; CHEREDNICHENKO, V.T., polkovnik; CHERNYSHEV, F.I., kontr-admiral zapasa; SHATURNYY, A.N., polkovnik; ROMANOV, I.M., red.

[Methodological materials for political instruction] Metodicheskie materialy k politicheskim zaniatiyam. Moskva, Voenizdat, 1965. 240 p. (MIRA 18:7)

1. Russia (1923- U.S.S.R.) Glavnoye politicheskoye upravleniye Sovetskoy Armii i Voenno-Morskogo Flota. Upravleniye propagandy i agitatsii.

PLETMINTSEV, V.; SIDORENKOVA, I.

Electrothermal stressing of high-strength wire. Bud.mat.1
konstr. 2 no.1:18-21 F '60. (MIRA 13:6)

1. Nachal'nik sektora stroitel'noy industrii Donetskogo
nauchno-issledovatel'skogo instituta nadshakhtnogo stroitel'-
stva (for Pletmintsev). 2. Starshiy inzhener sektora
stroyindustrii Donetskogo nauchno-issledovatel'skogo instituta
nadshakhtnogo stroitel'stva (for Sidorenkova).
(Electric heating) (Prestressed concrete)

RUSSIAN, G.P.; RYBCHENKOVA, N.I.; RYZHKOVA, T.V.

Emulsion factors determining the resolving power of the light sensitive
emulsion layer. Usp.nauch.fot. 10:230-234 '64. (MIRA 17:10)

PROTAS, I. R., KRAKAU, Yu. A. and SIDORENKOVA, P. T. (USSR)

"Etude de La Sensibilisation Chimique Des Emulsions Nucleaires."

paper presented at the Second Intl. Colloquium on Corpuscular Photography.
Montreal, 21 Aug - 7 Sep 1958.

Encl: B-3,114.647.

PHOTAS, I.R., KRAKAU, Yu.A., SIDORENKOVA, P.T.

Role of thiocyanogen ions during the chemical sensitization of
photographic emulsions with gold. Usp.nauch.fot. 7:87-95 '60.

(MIRA 13:7)

(Photographic emulsions) (Photographic chemistry)

GRATSIANSKAYA, Z.I.; SIDORENKOVA, P.T.

Effect of light diffusion in the top layer of a multilayer film
on the resolving power of the underlaying layer. Usp. nauch.
fot. 3:29-34 '62. (MIRA 17:7)

SMYSHLYAYEV, S.I.; SIDORENKOVA, V.A.

Determination of nickel and magnesium by the trilonometric
method in isomorphous salts. Trudy Ural. politekh. inst. (MIRA 17:10)
no. 160:74-76 '63.

MAKARA, A.M.; ROSENDZ, N.A.; SIDORETS, N.M.; KOSTYUCHENKO, V.A.

Welding centrifugal machinery rotors made of 30Kh2MSA steel with
a thickness of 32mm. Avtomatiz. 17 no. 189 Ja '64. (MIRA 17.3)

SIDOREK, M.S.

late results of a craniocerebral trauma. Trudy Izhev.gos.med.
inst. 21:170-176 '64. (M: RM 19:1)

1. Kafedra psikhiiatrii (nauchnyy rukovoditel' - prof.A.L.
Ieshchirskiy) Izhevskogo meditsinskogo instituta.

UMANSKIY, Yu.A.; KRADICH, I.M.; SIDORIK, A.A.

Relation of the distribution of labelled antibodies in rat organs to the method of their introduction into the body. Pat. fiziol. i eksp. terap. no.2:65-69 '64. (MIRA 17:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy i klinicheskoy onkologii (dir. - akademik AN UkrSSR prof. R.Ye. Kavetskiy), Kiev.

SIDORIK, E. P.

"The Effect of Beta and Gamma-Radiations on the Development and Course of Shwartzman's Phenomenon" by E. P. Sidorik, Kiev Scientific Research Roentgeno-Radiological and Oncological Institute, Fiziologichnyi Zhurnal, Vol 2, No 6, Nov/Dec 56, p 80

"The Effect of beta- and gamma-radiations on the development and course of Shwartzman's phenomenon was studied.

"Radiation sickness was produced by a single total irradiation with gamma-rays by the GUT-CO-400 apparatus in a dose of 900 r, and by intravenous irradiation with radiophosphorus in a dose of 1.2 microcuries per g wt.

"The Shwartzman phenomenon was produced in the following manner: a sensitizing intracutaneous injection (0.25 ml) of filtrate from a 6-day culture of intestinal bacillus, and reacting intravenous dose (0.5 ml) of a 6-day culture of intestinal bacillus 24 hours after the sensitizing injection.

S4M.1345

SIDORIK, E. P.

"Observations on the development of the Shwartzman phenomenon were carried out after 6, 12, 18, and 24 hours. Pieces of skin were taken for histological investigation 24 hours after the reacting injection.

"The intensity of the Shwartzman reaction was evaluated by taking into account the extent of hemorrhage, necrosis, and edema.

"As a result of the investigations conducted, it was established that preliminary gamma-irradiation permits the development of the Shwartzman phenomenon to a greater extent than preliminary irradiation of animals with beta-rays from radiophosphorus. On irradiation with gamma-rays during the period between sensitizing and reacting injections, the Shwartzman phenomenon is developed more rapidly and is somewhat more intense. Irradiation of animals with beta-rays from radiophosphorus between sensitizing and reacting injections suppresses the development of the Shwartzman phenomenon." (U)

SYM-1845

SIDORIK, Ye. P., Cand Med Sci -- (diss) "^{Effect}~~Influence~~ of Ionizing
Radiation upon the Formation and Development of Anaphylactic and
Heteroallergic Reactions." Kiev, 1957. 11 pp (Acad Sci USSR,
Department of Biological Sci), 120 copies (KL, 49-57, 116)

- 69 -

SIDORIK, Ye.P.

Effect of ionizing radiation on the development and course of
local allergic reactions. Vrach.delo no.2:141-143 P '57.
(MLRA 10:6)

1. Laboratoriya radioaktivnykh izotopov (sav. - deyst.chlen
AN USSR, prof. R.Ye.Kavetskiy) Kiyevskogo nauchno-issledovatel'-
skogo rentgeno-radiologicheskogo i onkologicheskogo instituta.
(RADIATION SICKNESS) (ALLERGY)

SIDORIK, Ye. B.

Effect of gamma and beta radiation on the development and course
of the Sanarelli-Zdrodovsky phenomenon [with summary in English].
Fiziol.zhur. [Ukr] 3 no.4:106-114 J1-Ag '57. (MIRA 10:9)

1. Kiivs'kiy naukovo-doslidniy rentgen-radiologichniy ta onkologich-
niy institut, laboratoriya radioaktivnikh izotopiv.
(BETA RAYS--PHYSIOLOGICAL EFFECT)
(GAMMA RAYS--PHYSIOLOGICAL EFFECT)
(ALLERGY)

SIDORIK, Ye.P.

Change in some aspects of the specific reactivity in animals
following external total gamma-irradiation with radioactive
cobalt. Uch. zap. KRROI 7:121-127'61 (MIRA 16:8)

(GAMMA RAYS--PHYSIOLOGICAL EFFECT)

SIDORIK, Ye.P.

Change of the polarographic wave in animals with transplanted
tumors. Uch. zap. KRROI 7:259-263'61. (MIRA 16:8)
(CANCER RESEARCH) (POLAROGRAPHY)

SIDORIK, Ye.P., kand.med.nauk

Electrophoretic spectrum of blood serum proteins in the process
of malignant degeneration under the influence of sex hormones.
Vrach. delo no.7:83-86 J1'63. (MIRA 16:10)

1. Laboratoriya eksperimental'noy terapii raka (zav. akad. AN
UkrSSR, prof. P.Ye.Kavetskiy) Kiyevskogo rentgeno-dariologicheskogo i onkologicheskogo instituta.
(CANCER) (BLOOD PROTEINS) (HORMONES, SEX)

SHUL'GA, S.Z. [Shul'ha, S.Z.]; TELYATNIK, A.I. [Teliatnyk, A.I.];
TARANUKHA, O.M.; SIDORIN, Ye.P. [Sydoryk, Ye.P.]

Electron paramagnetic resonance spectra of certain γ -irradiated
amino acids over a wide temperature range. Ukr. fiz. zhur. 8
no.4:460-468 Ap '63. (MIRA 16:8)

1. Institut fiziki AN UkrSSR, Kiyev.
(Paramagnetic resonance and relaxation)
(Amino acids—Spectra)
(Gamma rays)

SIDORIK, Ye.P.; YURKOVSKAYA, T.N.

Change in the fractional composition of blood proteins in animals with Guerin's carcinoma during the administration of cortisone. Vop. onk. 9 no.2:88-92'63. (MIRA 16:9)

1. Iz Ukrainского nauchno-issledovatel'skogo instituta eksperimental'noy i klinicheskoy onkologii Ministerstva zdравo-okhraneniya UkrSSR (dir. - akademik AN UkrSSR prof. R.Ye. Kavetskiy).

(BLOOD PROTEINS) (CORTISONE)
(CANCER RESEARCH)

SIDORIN, A.

27880 TIMOFEYER, L., I. SIDORIN, A. Sovetskiye velosipedy. (opisaniye
moykh modeley). Tekhnika molodezhi, 1949 No. 8 S. 22 23

SO: Letopis' Zhurnal'nykh Statey, vol. 37 1949

SIDORIN, G.

First examination papers. Prof.-tekh.obr. 18 no.6:25 Je '61.
(MIRA 14:7)

1. Zamestitel' direktora po uchebno-proizvodstvennoy rabote
Moskovskogo stroitel'nogo uchilishcha No.20.
(Examinations)

SIDORIN, Gavril Vladimirovich; MELEKHOV, Nikolay Yakovlevich;
SOKOLIN, G.I., nauchn. red.; NAZARENKO, M.I., red.

[Vocational training of tile layers] Proizvodstvennoe
obucheniye oblitsovshchikov. Moskva, Vysshaia shkola,
1965. 61 p. (MIRA 18:7)

SIDORIN, I.I.

SIDORIN, I.I.

Issledovanie kol'chugaluminievykh profilei, Moskva, 1925. 54 p.,
illus., tables, diagrs. (TSAGI. Trudy, no.16)

Summary in English.

Title tr.: Investigation of sections of Kolchugino type duralumin alloy.

QA911.F65 no.16

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of
Congress, 1955.

SIDORIN, I.I.

SIDORIN, I.I.

Issledovanie kol'chugaliuminiia. Khimicheskii sostav, mekhanicheskie svoistva i termicheskaiia obrabotka kol'chugaliuminiia. Moskva, 1925. 46 p., tables, diagrs. (TSAGI. Trudy, no. 15)

Bibliography: n. 44-46.

Summary in English.

Title tr.: Investigation of Kolchugino type duralumin alloy. Chemical composition, mechanical properties and thermal treatment of the alloy.

QA911.M65 no. 15

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

VORONOV, S.M., professor, doktor tekhnicheskikh nauk; TEREKHOV, K.I.,
kandidat tekhnicheskikh nauk, rukovoditel' Zaochnykh kursov,
otvetstvennyy redaktor; SIDORIN, I.I., professor, rukovoditel'
Zaochnykh kursov pouchebnoy chasti, nauchnyy redaktor; MATVEYEVA,
Ye.M., tekhnicheskiiy redaktor

[Workable aluminum alloys] Deformiruyemye aluminievye splavy.
Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1951.
74 p. (Zaochnye kursy usovershenstvovaniia inzhenerov metallovedov-
termistov, 34) (MIRA 9:10)
(Aluminum alloys)

SIDORIN, I. I.

"Role of Russian Science in the Development of Metallography and the Thermal Treatment of Metals," Part 2, Moscow, 1951

pages 36-57.

Metall, 1, 1, Ed.

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Metallovedeniye i Termicheskaya Obrabotka Metallov (Met. Blurry and Thermal Treatment of Metals) Moskva, Mashiniz, 1954.

234 p. Illus., Diagr., Graphs, Tables.

At Head of Title: Moskovskoye Vyscheye Tekhnicheskoye Uchilishche.

Bibliography at the end of each chapter.

SIDORIN, I.I., professor.

Brief history of the finding and development of the Metallographic Department in Moscow Technical College. [Trudy] MVTU no.41:3-5 '55.
(MLRA 9:10)

(Moscow--Physical metallurgy--History)

Sidorin, L.I.

Mistr: 4E2c

Investigation of hot media for the isothermal treatment of steel, L. I. Sidorin and B. N. Arzamasyov. *Metallurg. i Termiches. Obrabotka Metal.*, *Sbornik Statei* 1955, 6-19. The rate of cooling V , degree/sec., of cylindrical specimens of 18 Cr-Ni steel heated at $900 \pm 15^\circ$ in molten baths of mixts. of the systems $\text{KNO}_3\text{-NaNO}_2$, $\text{KNO}_3\text{-NaNO}_2$, 35% NaOH -65% KOH , and 35% NaOH -65% $\text{KOH-H}_2\text{O}$ and in machine oil maintained at $300 \pm 5^\circ$ and at $20\text{-}30^\circ$ above the m.p. of the fused mixts. was detd. by automatic recording of the temp.-time function. V was independent of the compn. of the molten bath. In the temp. range of the bath of $160\text{-}400^\circ$ the rate of cooling of the specimen at 650° was expressed by $V_{650} = 1610 - t - 0.002t^2$ and at $t = 650\text{-}55^\circ$, $V_{650} = 1258 - 0.135t - 0.00353t^2$. The cooling capacity increased in the presence of H_2O . I. B.

Sidorin, I. I.

Processes of σ -formation in welds of Cr18Ni9 austenitic steel during prolonged heating. I. I. Sidorin and G. G. Mukhin. *Metallurg. i Term. Obrabotka Metal.*, Sbornik State 1955, 20-41. — The effect of the alloy composition of V welds of Cr18-Ni9-Ti0.5 steels on the σ -phase formation during prolonged heat-treatment (up to 1000 hrs. at 650°) and the effect of stabilization at 800° (3 hrs.) and water quenching from 1100° (3 hrs.) was studied. In welds contg. 18-23% Cr σ -phase appeared after 25 hrs. and its proportion increased with the Cr content. In welds contg. 2% Si σ -phase appeared after 2.5 hrs. at 650° and the process of its formation was completed after 25 hrs.; when used for the prevention of hot-cracking the proportion of Si should not exceed 1.5%, especially if the welds were designed for high-temp. service. The presence of V increased the proportion of ferrite. In ferrite σ -phase appeared after 2.5-25 hrs. but in austenite it appeared only after 250 hrs. Stabilization affected the proportion of σ -phase and the mech. properties of the weld very little. Quenching improved the mech. properties of low alloyed welds of the 18-8 type. But in welds contg. more than 2% Si + 21% Cr or 1% Si + 1.5% V, quenching did not improve the mech. properties. Welds which could not be thermally treated should be made with electrodes such as to insure in the weld less than 0.1%C, 18-19%Cr, 8-9%Ni, less than 1.5%Si, and up to 1%Nb.

I. Pencovitz

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SIDORIN, I.I., professor; MAKAROVA, V.I., kandidat tekhnicheskikh nauk.

Investigating the heat treatment of fuel-pump plunger pairs
made of KhVG steel. [Trudy] MVTU no.41:117-123 '55.

(MLRA 9:10)

(Steel alloys--Heat treatment)

SIDORIN, I.I., professor; SOLOV'YEV, N.I., inzhener.

Isotherma treatment of Al-4 aluminum alloy castings. [Trudy]

MVTU no.41:150-162 '55.

(MLRA 9:10)

(Alluminum alloys--Heat treatment)

SIDORIN, I.I., professor; SIDUNOVA, O.I., inzhener.

Investigating the kinetics of aging in Al-4 aluminum alloy
castings. [Trudy] NVTU no.41:163-191 '55. (MLRA 9:10)

(Aluminum alloys--Metallography)

25(1)

PHASE I BOOK EXPLOITATION

SOV/2446

Akademiya nauk SSSR. Institut nauchnoy i tekhnicheskoy informatsii

Title: Izgotovleniye izdeliy metodami poroshkovoy metallurgii
(The Manufacture of Products by the Methods of Powder Metallurgy)
Moscow, Filial Vsesoyuznogo instituta nauchnoy i tekhnicheskoy
informatsii, 1957. 23 p. (Series: Peredovoy nauchno-tekhnicheskoy i proizvodstvennyy opyt. Tema 4, No. M-57-320/3)
1,400 copies printed.

Ed.: A. N. Malov, Candidate of Technical Sciences; Exec. Ed.:
L. Ye. Shobik, Engineer; Tech. Ed.: T. M. Sorokina.

PURPOSE: This booklet is intended for specialists in the field of powder metallurgy.

COVERAGE: The three articles in this brief collection deal with several aspects of the manufacture of sintered-metal and cemented-carbide products. The first article is concerned with the effect of various factors (chemical composition, surface treatment, carbide grain size, and temperature) on the fatigue

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The Manufacture (Cont.)

SOV/2446

limit of cemented tungsten-cobalt carbides at normal and elevated temperatures. The remaining two articles deal with centrifugal mixers for cermet compositions and with a four-cavity compacting die for iron-ceramic bushings. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Kreymer, G. S.; I. I. Sidorin; and Ye. F. Tishchenkova. Fatigue Limit of Hard Alloys at Normal and Elevated Temperatures	3
Effect of chemical composition of hard alloys on their fatigue limit	7
Effect of surface treatment on the fatigue limit of hard alloys	11
Effect of the grain size of the carbide phase on the fatigue limit of tungsten-cobalt carbides	13
Effect of Temperature on the Fatigue Limit of Hard Alloys	14
Conclusions	17

Temkin, I. V. Centrifugal Mixers for Metal-Ceramic Compositions	20
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Card 2/3

The Manufacture (Cont.)

SOV/2446

Nikolayev, N. N. Four-cavity Die for Compression-molding of
Iron-Ceramic Bushings

23

AVAILABLE: Library of Congress

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10-27-59

Card 3/3

24-58-3-15/38

AUTHORS: Kreymer, G.S., Sidorin, I.I. and Tishchenkova, Ye.F.

TITLE: Fatigue Strength of Hard Sintered Tungsten Carbide-and-Cobalt Alloys (Ustalostnaya prochnost' metallokeramicheskikh tverdykh splavov karbid vol'frama-kobal't)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 3, pp 113-118 (USSR)

ABSTRACT: Tests were carried out upon specimens of sintered tungsten-carbide cobalt compositions mounted as simply supported centrally loaded bent beams in a special yoke fixture adapted to a Schenck resonance fatigue machine for tension-compression loading. A non-symmetrical loading cycle with a constant dissymmetry co-efficient was applied five million times. The specimens, ground by a chemical-mechanical method, were surface lapped with boron carbide. The same set-up was used at elevated temperatures, when the specimen was surrounded with an externally heated chamber containing argon or helium. The tests were designed to establish the relations between the fatigue strength and the composition (cobalt content) or the grain size at both room and elevated temperatures. The fatigue strength closely follows the regularities of static

Card 1/2

24-58 3-15/38

The Fatigue Strength of Sintered Compositions of Tungsten Carbide and Cobalt.

strength in relation to cobalt content grain size and temperature. Some discussion of these relations, common to static and fatigue strength, is given alongside graphs of mechanical properties and fatigue strength over a range of the above variables. The practical conclusion is reached that under conditions of metal cutting alloys with a lower cobalt content may not only have a greater wear resistance, but also a larger fatigue strength. This effect verified under production conditions, increases with the cutting speed, i.e. the temperature of the cutting edge. In fatigue theory the part played by initial plasticity as a measure of fatigue resistance has been emphasised. There are 4 tables, 9 figures and 5 references, 2 of which are Soviet, 2 English and 1 German.

ASSOCIATION: ~~Vsesoyuznyy~~ nauchno-issledovatel'skiy institut tverdykh splavov MVTU im. Bauman (All-Union Research Institute for Hard Alloys MVTU im. Bauman)

SUBMITTED: June 18, 1957.

Card 2/2 1. Alloys--Fatigue

no, I. I.

SOV/122-58-5-25/26

AUTHOR: Podurayev, V.N., Candidate of Technical Sciences, Dotsent

TITLE: Inter-Vuz Conference on Technology
(Mezhvuzovskaya tekhnologicheskaya konferentsiya)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, Nr 5,
p 84 (USSR).

ABSTRACT: An inter-vuz conference took place in January, 1958 at the MVTU (Moscow Technical University) imeni Bauman, devoted to manufacturing problems in the engineering and instrument industries. 22 universities and representatives of research institutes in the main engineering and instrument branches took part. Over 50 papers were read. The following papers were devoted to the state of knowledge of the theoretical foundations of production engineering. "The Basic Trends of Development in Engineering Manufacture" by Satel Ye.A., "The Fundamental Theoretical Problems in the Development of Casting", by Rubtsov, M.N., "Current Problems of Metallurgy and Heat Treatment of Metals" by Sidorin, I.I., Professor, "Accuracy and Interchangeability in Engineering" by Prof. B.S. Balakshin and "Present State of the Theory of Plastic Deformation in Press-forming Manufacture" by Ye.A. Popov, Doctor of Technical Sciences. In these papers, the main attention was devoted to

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Inter-Vuz Conference on Technology

SOV/122-58-5-25/26

manufacturing methods which could be performed by small, light, universal and economic plants. new production methods capable of improving the life of machine components are needed. The trends of increasing power of machine tools, greater expansion of high-speed manufacturing processes and the need to ensure the greatest precision in manufacture were emphasized. The theory of interchangeability of machine components requires further development primarily in its application to pneumatic, hydraulic and electrical elements. In several papers, the inadequate use made in the theory of manufacturing methods of modern achievements in science was deprecated. Further developments in the several branches of engineering science needed in connection with topical manufacturing problems were indicated. Widespread automation and overall mechanisation of manufacture were discussed in the following papers: "Trends of Development in Automatic Welding" by Nikolayev, G.A., Professor, Corresponding Member of the Academy of Architecture and Building "The Automation of Manufacturing Processes in Engineering" by Prof. G.A. Shaumyar, "The Part Played by Electronics in the Solution of Automation Problems" by Kugushev, A.M., Professor, "The Configuration and Classification of Automatic Production

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SOV/122-58-5-25/26

Inter-Vuz Conference on Technology

Machines and Their Basic Elements" by Prof. S.I. Artobolevskiy, "The Basic Trends of Development in the Theory of Automatic Regulating and Control" by Solodvnikov, A.V. Professor, "The Application of Electronic Devices to the Programme Control of Metal Cutting Machine Tools" by B.V. Anisimov. In the present state of its development, automation must ensure not only an increased productivity of labour but also a high accuracy in the performance of its individual operation and the constancy of its properties in time. Problems of the evaluation of the economic effectiveness of introducing any form of automation under given manufacturing conditions must be further elucidated. The flexibility of automated production should be given attention. The problems set by these developments must be solved to an increasing degree by the methods of automatic electronic regulating and control and by programme control systems.

Card 3/3 1. Industrial Production--USSR 2. Engineering--USSR 3. Instruments
--Production

SIDORIN, I.I.; RYSKINA, Ye.Y.; PASHCHENKO, S.V.; SALAMAKHINA, G.M.

Using the nitriding method in hardening surfaces of parts made
of titanium alloys. Nauch. dokl. vys. shkoly; mash. i prib. no.2:
120-136 '59. (MIRA 12:12)

(Case hardening)

(Titanium alloys--Metallography)

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29219

S/145/61/000/006/006/007
D203/D305

AUTHORS: Sidorin, I.I., Doctor of Technical Sciences, Professor, and Silayeva, V.I., Engineer

TITLE: A new aluminum alloy for pressure casting

PERIODICAL: Izvestiya vysshikh uchebnykh zavendeniy. Mashinostroyeniye, no. 6, 1961, 129-136

TEXT: Alloy AЛ4 (AL4) containing 9% Si and the system Al-Si-Mg were chosen as a basis for developing the new alloy. First pressure cast specimens were used for tensile and impact tests. Silicon and magnesium were found to increase strength, but more than 7.5 - 8.5% Si and 0.3 - 0.5% Mg was undesirable on account of the rapid drop in ductility. Only 0.25 - 0.5% of manganese was needed, mainly to bind iron. Copper increased strength more effectively than silicon and with a lower drop in elongation. With the optimum of 0.4% Mg the best combination of strength and ductility was achieved with 1 - 1.5% of copper. Addition of 0.1 - 0.3% of titanium was found to increase both strength and ductility. In this

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29219

S/145/61/000/006/006/007
D203/D305

A new aluminum alloy ...

amount titanium is entirely in solid solution. The optimum composition of the alloy is given in Table 2. Both strength 29 - 32 kg/mm²) and elongation (4 - 5%) of this alloy were higher than those of the commonly used Al₂. Ageing for 8 hours at 180°C increased strength by a further 4 kg/mm² but reduced elongation from 5 to 3%. Because all the copper is in the supersaturated solution in aluminum, the compound CuAl₂ does not exist to act as a cathode in electrolytic microcells. Therefore, the alloy has a higher corrosion resistance. There are 8 figures, 6 tables and 5 Soviet-bloc references.

ASSOCIATION: MVTU im. N.E. Bauman (MVTU im. N.E. Bauman)

Card 2/3

SILAYEVA, V.I.; Prinsipali uchastiye: SIDORIN, I.I., prof.; SIMAKOV, A.V.;
LAZUTIN, D.D.

MVTU-1 aluminum foundry alloy. Alum. splavy.no.1:14-21 '63.
(MIRA 16:11)

ACCESSION NR: AP4005830

S/0129/63/000/012/0035/0037

AUTHOR: Sidorin, I. I.; Fridlyander, I. N.; Silayeva, V. I.; Kuznetsova, Ye. A.

TITLE: Investigation of the structure and properties of SAP-I material

SOURCE: Metalloved. i termich. obrab. metallov, no. 12, 1963, 35-37

TOPIC TAGS: sintered aluminum powder, SAP sheet, SAP sheet structure, SAP sheet strength, SAP sheet ductility, SAP cold rolling, SAP hot rolling, SAP sintering SAP annealing, SAP structure, SAP property, SAP alloy

ABSTRACT: The authors have investigated the effect of technological conditions, especially the temperature of preliminary sintering and annealing, on the structure and mechanical properties of sintered aluminum powder products at higher temperatures (especially above 500C). The tested material was first sintered at temperatures of 500 and 650C for 2 hours, hot pressed at 500C under a specific pressure of 55 kg/mm², pressed at 500-550C with 89.5% deformation, hot rolled at 500C with 70% deformation, and cold rolled with a deformation of 50%. Preliminary sintering at higher temperatures (650C) decreased the strength and hardness of the semifinished product and increased the percentage of elongation. This effect may be due to recrystallization in microvolumes. The texture formed as a result of pressing and hot and cold rolling of this material was very stable up

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ACCESSION NR: AP4005830

to 650C. The mechanical properties of pressed and rolled SAP-1 material deteriorated after annealing, and microcracks appeared. The temperature of annealing leading to microcracks depends on the temperature of preliminary sintering of the briquets. It was concluded that an increase in the sintering temperature up to 650C markedly increases the degasification coefficient and consequently reduces the tendency to microcrack formation during annealing while widening the temperature interval of the stability of the mechanical properties of the annealed and rolled sheet of SAP-1. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 09Jan64

ENCL: 00

SUB CODE: ML, MA

NO REF SOV: 000

OTHER: 000

Card 2/2